Environmental Attitudes and the Politics of Distrust

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Abstract
This article reviews recent studies showing that distrust lies at the heart of the serious crisis of sustainability that humanity is failing to address, insofar as distrust of environmental scientists, communicators, and policymakers are all undermining public demand for better public policies. Generalised distrust of scientists is rare, but political distrust is ubiquitous, such that even people who are concerned about environmental problems are often opposed to potential policy solutions. There are also people, however, who do not even believe in some of the problems—most notably climate change. This scepticism is sometimes interpreted as a consequence of their preferring free markets to regulation; in other ways, though, the sceptics are not at all sympathetic to free markets. What appears more distinctive about them is their distrust of virtually all elite social institutions, including communities of experts, and a corresponding divide between their beliefs and preferences and those of experts generally.

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Scientists who study the natural world tell us that, for anthropogenic reasons, the earth is in serious trouble—to the point where environmental degradation is putting human livelihoods at risk (e.g., Steffen et al. 2015). Why is humanity proving so unable to do anything about this worsening, self-destructive crisis of sustainability?

When they choose to, governments can take actions that generally succeed in solving environmental problems. For example, because of successful public policy interventions, air quality is much improved in many cities, lead has been removed from fuel and paint, and the frightening problem of the ozone hole has largely been resolved (e.g., Dasgupta, Laplante, Wang, and Wheeler 2002; Dietz, Ostrom, and Stern 2003; Rockström et al. 2009).[1] But governments are not doing anywhere near as much as they might. So why are their efforts so half-hearted?

One key reason is weak support by public opinion, if not outright opposition, and this article argues that the public's negative attitudes about many environmental policies are due largely to distrust.[2] That is, people are not calling for many policies they might otherwise demand, because they distrust science, government, other social institutions, and the people within them. Generalized distrust of scientists and the information they provide is rare, but distrust of governments and their proposals is ubiquitous, such that many people oppose policy responses even to problems whose seriousness they readily acknowledge. Additionally, however, there are also people who do not even believe scientists' claims about the problems—most notably climate change.

Many studies suggest that people who disregard the seriousness of environmental problems are simply free market enthusiasts who do not want to confront inconvenient facts

[1] Private voluntary actions could also do a lot to address some environmental problems (see e.g., Dietz 2015), though governmental action is usually key.
[2] This is not at all to deny the damaging impact of obstructive campaigning by some firms and businesspeople (e.g., Bonds 2016; Farrell 2016).

implying the need for regulatory action by the state. But considering their attitudes in other areas, environmental science sceptics are not really so consistently supportive of free markets. Instead, what is most distinctive about these people is their alienated, resentful distrust of virtually all elite social institutions, including communities of experts. Their views and preferences with respect to many issues—and the relative attention they pay to environmental problems relative to other concerns—therefore diverge from those of experts. The article concludes by discussing the place of distrust and the rejection of expertise in contemporary politics more broadly, and by outlining areas for future research.

Distrust and Environmental Attitudes

Trust is "a belief about another person's trustworthiness with respect to a particular matter at hand that emerges under conditions of unknown outcomes" (Robbins 2016: 976), where the believer is vulnerable to the other person's actions (van der Meer forthcoming). Recent literature has found that trust, or its absence, shapes public support for environmental protection and policy in a number of ways, reflecting that the findings and understandings of scientists and other environmental researchers feed through to the attitudes, preferences, and behaviours of the public through a series of steps. Dietz, Fitzgerald, and Shwom (2005) for example describe how values lead to beliefs, beliefs to norms, and norms to behaviours. Similarly, Poortinga, Spence, Whitmarsh, Capstick, and Pidgeon (2011) distinguish between trend, attribution, and impact scepticism with respect to climate change—concerned respectively with whether global temperatures are trending upwards, whether such a trend (if it exists) is anthropogenic, and whether such a trend (if it exists and is anthropogenic) is harmful. In each of these sequences, each step is a prerequisite for the next.

Yet there is no guarantee that any step will in fact lead to the next. For example, while people's actions are clearly tied to their perceptions of problems (e.g., Krosnick, Holbrook,

Lowe, and Visser 2006), people who recognize environmental problems do not necessarily support policy or regulatory responses (Capstick and Pidgeon 2014; Fairbrother 2016c; Hao 2014; Marquart-Pyatt 2016). Even people confronted with serious pollution right in their own communities may nonetheless oppose government efforts to do anything about it (Hochschild 2016). Trust is therefore relevant at each of several distinct stages in a process culminating in the policy preferences of individuals, and each of the following can also be taken as types of trust that shape environmental attitudes:

(1) trust in science and scientists—the providers of basic facts about forms of environmental change, their anthropogenic drivers, and their potentially negative implications (do people trust scientists when they say that environmental problems are real, serious, and anthropogenic?);

(2) trust in environmental organisations and the media—the carriers of messages about environmental problems (do people trust environmental journalists and advocates when they highlight some environmental problem and/or warn that scientists are concerned about it?);

(3) trust in politicians and public administrators—the people involved in planning and delivering policy solutions to environmental problems (do people trust the information government agencies provide about environmental problems, and do they trust public officials' claims and promises about the policy responses they propose?).

I briefly discuss each of these stages in turn.

First, people generally have to trust scientists in order to believe in most environmental problems, since scientists are the source of most of the information about such problems. Without scientists, people would be unlikely even to know about non-obvious problems such as the ozone hole, global warming, biodiversity loss, or the effects of micro-

plastics, PCBs, dioxins, and DDT. For example, Rachel Carson was an applied scientist with the U.S. Fish and Wildlife Service before she wrote the book *Silent Spring*, which did so much to raise awareness of the harmful effects of agricultural chemicals. Where people are unconcerned about some environmental problem, then, they generally also doubt the trustworthiness of the relevant scientists.

Empirically, however, blanket distrust of scientists is rare; in most countries, surveys show that people trust scientists almost as much as they trust anyone.[3] Since "people often use the credibility of the messenger as a heuristic, or information shortcut, for deciding whether to accept communicative messages," then, people mostly do believe that environmental problems are real and serious (Brewer and Ley 2013: 117; Arnold et al. 2016; Poortinga, Spence, Whitmarsh, Capstick, and Pidgeon 2011). Still, with respect to some specific problems, there are significant numbers of people whose views diverge from the scientific consensus. This may be because people inherently distrust the scientists, but distrust in scientists may also reflect people's dislike for what scientists have to say. In particular, people may dislike the policy responses they assume will follow from accepting some factual statements about an issue (e.g., Campbell and Kay 2014; Kahan, Jenkins-Smith, and Braman 2011; Nisbet, Cooper, and Garrett 2015).[4] The trust that most people feel towards scientists, then, can fail in the context of politicised debates about specific environmental problems (Funk and Kennedy 2016). The public may impugn scientists' trustworthiness, for example, by suggesting that their conclusions reflect nothing more than

[3] Many of the empirical studies cited in this article draw on data from only one country—in some cases even just part of a single country. Findings from such studies may not hold everywhere. Yet there are many issues on which countries seem to be similar, and so I do not qualify every statement with a warning. Suffice to say that more comparative research would be useful.

[4] As E. Klein (2014) puts it, much of the public appears to define an "expert" as "a credentialed person who agrees with me": Kahan's experiments show that people are much less likely to call a person an expert if s/he makes a statement with which they disagree.

intellectual fads and the selfish pursuit of research grants or opportunities for promotions and awards.

Second, even people who are willing to take scientists at their word may not trust other messengers seeking to disseminate scientific knowledge, understandings, and findings—such as the news media or environmental organizations. As Brewer and Ley (2013: 115) explain, "trust plays a key role in the communication of scientific information about the environment to the public." People may suspect that scientists have been misquoted or that reporters with predefined agendas have sought out some scientific reports rather than others, consistent with those agendas. Similarly, environmental organizations may be regarded as having ulterior motives. Empirically, trust in the news media tends to be low, while trust in environmental organizations is comparatively high (ibid.; Ipsos MORI 2015).[5]

Finally, even if people come to believe that some environmental problem is real and serious, they may be sceptical of potential efforts to take action against it. In a recent study of people's trust in different sources of information about environmental problems, Marquart-Pyatt (2016) finds that, fairly consistently across countries, people are most trusting in universities, then environmental groups, radio or TV programs, newspapers, and finally government departments (see also Funk and Kennedy 2016). But governments are not just sources of information; they are also key actors for implementing solutions. Environmental attitudes therefore follow not just from what people believe about the reality and seriousness of environmental problems, but also about the merits and consequences of potential policy responses, and about the competence and honesty—the trustworthiness—of the people proposing and implementing them.

[5] Ipsos MORI (2015) asked respondents: "Now I will read you a list of different types of people. For each, please tell me if you would generally trust them to tell the truth or not?" In a representative sample of Britons, 79% expected scientists to tell the truth, 68% The ordinary man/woman in the street, 35% business leaders, 25% journalists, and 21% politicians.

To support putting a price on pollution and resource use—the number one policy recommendation of environmental economists—a person needs to be confident that the government will spend new green tax revenues wisely, and that they aren't just engaging in a "tax grab" (Fairbrother 2016d; Lorenzoni, Nicholson-Cole, and Whitmarsh 2007). To support subsidies, they need to be convinced that the government is not just wasting money (e.g., by supporting unworkable technologies). To support a new regulation (such as a performance standard), they need to believe that the government is not just seeking greater control over industry. People's normative preferences about what to do in the face of environmental problems, then, may vary net of whatever positive beliefs they possess about those problems. Empirically, political trust correlates strongly with support for policies for environmental protection (Fairbrother 2016a; Harring 2013).

Trust in government matters because it is very low (e.g., Neville and Weinthal 2016). This is partly a question of partisanship: it is no surprise that people do not much trust the government if they did not vote for the winning party. But even people who have voted for the government do not seem to trust government promises (see Fairbrother 2016d). As a consequence of widespread political distrust, then, people's support for policy actions against environmental problems is often weak. For example, when the International Social Survey Programme asked nationally representative samples of respondents in 32 nations how willing they would be to pay higher taxes in order to protect the environment, the most common answer was "very unwilling"—the least enthusiastic option out of five.

Empirical studies of how such attitudes shape actual policy outcomes remain few, but those studies that have been conducted have found evidence of a connection (e.g., Agnone 2007, Weaver 2008). Moreover, as argued by Manza and Brooks (2012), few theories of policy outcomes make sense in the absence of some reference to public opinion at least as a causal mechanism; and empirical studies find that public opinion shapes policy generally

(Shapiro 2011). Cases where public opinion has shaped environmental policy outcomes are not hard to find. In the last year, for example, public pressure led the Irish government to repeal water charges and to weaken protections for ecologically sensitive bogs (Little 2017), while voters in Washington State voted down an initiative to introduce a state carbon tax (Lavelle 2016). In previous years, Australian voters elected a government that specifically promised to repeal the country's carbon tax, while Swiss voters have twice rejected increased taxes on polluting energy in national referenda (Baird 2014; Maclucas 2015; Thalmann 2004).

Hard Core Distrusters

Various kinds of distrust each, therefore, predict lower support for key environmental policies. Most people trust claims about the seriousness of environmental problems, but are broadly hostile to proposals for policy solutions because of their political distrust. There are also people, however, who do not even believe in the seriousness of some of the problems that most concern environmental scientists. What explains their scepticism?

A paper by Nagel (2011) indirectly illustrates why voters may be so oblivious to the costs of inaction on environmental problems: rational ignorance. She describes how the managers of some large capitalist enterprises are taking climate change seriously, because they have clear financial motivation to act rationally in the face of the serious risks that climate change presents to them. For an individual voter, by contrast, the benefits of getting well-informed about environmental issues are small relative to the (time) costs—as for any other issue (Chong 2013; Harrison 2010). Voters, that is, can afford to be ideological. But why are so many biased against rather than in favour of environmental science and policy?

Many studies in the environmental sociology and risk/science communication literatures suggest that what most distinguishes people who reject environmental science is

their political ideology—particularly their attitudes towards markets (see Harring and Sohlberg 2016 for a discussion). There are important differences between the environmental attitudes of people with different basic values or political party allegiances (e.g., Dunlap and McCright 2015; Kahan, Peters, Wittlin, Slovic, Ouellette, Braman, and Mandel 2012; Kahan, Jenkins-Smith, and Braman 2011; Hmielowski, Feldman, Myers, Leiserowitz, and Maibach 2014). This is particularly true in the U.S. with respect to climate change (e.g., McCright and Dunlap 2011; McCright, Xiao, and Dunlap 2014). Such studies suggest that scepticism about environmental problems is "motivated reasoning." That is, economic liberals (in the European rather than American sense) dislike the policy implication implied by the science—regulatory action by the state—and so are motivated not to accept it (Kahan, Jenkins-Smith, and Braman 2011; Nisbet, Cooper, and Garrett 2015). In the U.S. context, Gauchat (2012) suggests that distrust of science has expanded in recent decades because many Americans have grown more hostile to public regulatory actions which appear necessary in light of recent scientific findings.

But are most environmental sceptics really economic liberals in denial about some inconvenient truths? By some measures, people who believe in the benefits of free markets are actually more enthusiastic about environmental policy, not less (e.g., Fairbrother 2016a). And mainstream economists—who sociologists generally regard as high priests of market liberalism—consider environmental externalities a problem, because they reduce human welfare (see Fairbrother 2016b). Economists argue for pricing (taxing) externalities, in order to maximize social well-being (Pearce 2002; Taylor 2015). Markets and environmental protection are therefore not intrinsically antithetical. Not surprisingly, the left-right gradient in environmental attitudes varies cross-nationally, and there is little evidence of a correlation between the leaning of a country's governing party and its likelihood of enacting climate legislation (Arnold et al. 2016; Fairbrother 2016a; McCright, Dunlap, and Marquart-Pyatt

2016; Fankhauser, Gennaioli, and Collins 2015). The extreme ideological divide on climate change in the U.S. is, in short, atypical. And even in America environmental protection has not always been viewed so negatively by conservatives. Famously, Republican presidents Richard Nixon and George H.W. Bush established the Environmental Protection Agency and the hugely successful SO_2 trading system, respectively (Schmalensee and Stavins 2013).

What is instead most distinctive about those who reject basic facts of environmental science is their broad-based distrust of seemingly all elite social institutions—above all the state, but also the scientific field, the mass media, and even capitalist enterprise. These hard core distrusters tend to be older and less educated, and feel alienated from the lives and worldviews of elites in both the public and private sectors, and in other domains populated by the highly educated and/or privileged. They resent what they perceive as well-heeled urbanites' routine disparaging of ordinary people and more traditional ways of life (Hochschild 2016). Instead of a trade-off, then, research finds that different kinds of trust—notably trust in government and various other institutions—tend to correlate (OECD 2013). Just as trust in public officials is low, so is trust in business and businesspeople. A 2016 Gallup poll, for example, found that only 18% of Americans report being confident in big business.[6]

While it is certainly true that people "who distrust government are likely to advocate restricting its activities" (Paxton and Knack 2011: 174), it is not the case that people who distrust government necessarily trust markets and corporations instead. One reason is that state action and market freedom are not antithetical (Wacquant 2012). As Karl Polanyi observed long ago, "*laissez-faire* [is] the product of deliberate state action" (1957: 141). Since public officials are often key advocates of (neo)liberal policy changes, distrust of

[6] 68% are confident in small business, however.

public officials may lead also to distrust of free market policies, and may inhibit rather than encourage market liberalization.

Since they distrust business, government, science, and experts, the views and preferences of hard core distrusters may diverge on some issues from those of all of these groups simultaneously. In the recent EU referendum in Britain, for example, those who voted to leave the European Union expressed more distrust than trust in businesspeople, charities, the Bank of England, international organisations, think tanks, academics, economists, journalists, and politicians (YouGov 2016). These groups were overwhelmingly opposed to Brexit. While Britons who voted to remain in the EU expressed more trust than distrust in all of them (think tanks, politicians, and journalists excepted), many of those who voted to leave said they would "rather put [their] trust in the wisdom of ordinary people than the opinions of experts" (British Election Study Team 2016).

It would appear then that scepticism about environmental science reflects a pervasive distrust of experts on the part of some demographic groups—particularly older generations, residents of more rural areas, and the less educated. Hard core distrusters are not much concerned about the environment; it is not a topic of great priority or interest to them. Instead, they devote what political interest they possess to issues such as immigration and crime—much lesser concerns for experts and the educated. In this sense, the people most antithetical to environmental protection are the supporters of neo-nationalist parties in Europe and Donald Trump in the United States.[7] Despite being regarded as "right-wing," such movements are not very consistently supportive of free markets (Eger and Valdez 2015). Given their lower socio-economic constituencies and anti-elitist sentiments, they are

[7] Relative to the supporters of other candidates in the 2016 Republican primary, Trump supporters were exceptionally anti-elitist and distrusting in experts (Rahn and Oliver 2016). Trump's success reflects declining political trust among U.S. Republicans generally (Hetherington 2015); two-thirds of his supporters do not even trust economic data provided by the U.S. government (Rampell 2016).

concerned about inequality and even opposed to many welfare state cutbacks (ibid.). At the same time, their distrust influences their attitudes towards "out-groups in their own country and beyond" (Mansfield and Mutz 2009). Since internationalism is heavily tied to trust, and people's feelings about liberal international economic policies reflect their internationalism, distrust correlates with support for restrictive trade policies, hostility to the outsourcing of production, and opposition to immigration (ibid.; Kaltenthaler and Miller 2013; Mansfield and Mutz 2013; O'Rourke and Sinnott 2001; Sides and Citrin 2007).[8] Support for trade liberalization, then, correlates with more rather than less support for environmental protection (Bernauer and Nguyen 2015). Overall, environmental beliefs are more about trust in experts than attitudes about markets.

Conclusions and Future Research

There is a pressing need for more research on distrust, including on both hard core and soft care distrusters—people who distrust everything and everyone, and people who are more trusting of experts but still distrusting of government. It may not be a hopeless effort for environmental advocates to try to win over the latter. Experts and advocates should perhaps articulate more forcefully that environmental policy generally does work—governments just do not use it enough. Hard core distrusters, on the other hand, are likely to be harder to convince. Yet social science would do well to study these people, the determinants of their beliefs, and the relationships among their many forms of distrust. Do all forms of distrust derive directly from a single type of experience or circumstance? Or are some forms of distrust derivatives of others, such that mitigating some would also help mitigate others?

[8] Immigration is a market phenomenon, insofar as flows of migrants reflect the pull and push of demand and supply in the labour market, and obey much the same economic logic as international trade (Scheve and Slaughter 2001). Generalized trust also predicts support for other forms of internationalism, such as foreign aid (Paxton and Knack 2011.)

Van der Meer (forthcoming) provides a comprehensive review of what we know about the sources of political (dis)trust; key sources include corruption, procedural fairness and inclusiveness, and government performance in economic terms. In the area of the environment specifically, a number of studies have also documented that distrust of scientists and their work has derived from deliberate campaigns to cast doubt on their competence, impartiality, and/or integrity (Lewandowsky, Mann, Brown, and Friedman 2016). Such campaigns have often been funded and reflect the agendas of corporations engaged in polluting activities (e.g., Farrell 2016; Oreskes and Conway 2010), and span a network of front groups, conservative think tanks, and sometimes scientists with extreme minority views on an issue (Bonds 2016). Distrust of science can also emerge out of nationalist suspicions that scientific claims challenging the social status quo are foreign conspiracies (Liu 2015).

Other than their dislike of markets, there are also other possible reasons for political conservatives to express disproportionate distrust of environmental science and/or policy proposals. Gauchat (2012) suggests that conservatives' hostility to science generally may be due to their perceiving scientific authority as a secular challenge to traditional religious authority. Harring and Sohlberg (2016) use an experiment to show that people on the right—who tend to attach more priority to economic growth—respond more negatively than those on the left to environmental policy proposals framed as costly for growth. Debatable claims that protecting the environment necessarily requires economic de-growth (e.g., Victor 2010), and therefore that it "changes everything" (N. Klein 2014), may then be driving up distrust.

Given all the above, there is much to investigate in future research.

First, how are different kinds of distrust shaping environmental attitudes in different kinds of countries? Existing research has made use of a limited range of survey questions, often in a limited range of countries. There remains much to be investigated both about

people's attitudes towards different kinds of policies, and about the impacts of framing policies in different ways.

Second, more generally, why have generalized trust, political trust, and institutional trust been declining in so many societies in recent decades (Dalton 2005; Twenge, Campbell, and Carter 2014)? And to what extent are seemingly national patterns actually limited to specific groups? In the U.S., for example, trust in science has only been declining among conservatives (Gauchat 2012). Why so? And has this been the same for other countries?

Third, despite rising levels of education, younger generations appear to be less trusting and more cynical about politics—but they are seemingly also more trusting in outgroups and more concerned about the environment (Bonikowski and DiMaggio 2016; Brewer 2004: 331; Lawless and Fox 2015). Are then the drivers of their concerns, beliefs, and/or preferences different from those of previous generations? If so, how and why?

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